CALTRANS

United States Department of Transportation
Federal Highway Administration

RECORD OF DECISION

San Diego Freeway (I-405) Improvement Project

Interstate 405 in Orange and Los Angeles Counties, California
District 12, Post miles: 12-ORA-405 PM 9.3/24.2 / 07-LA-405 PM 0.0/1.2
12-ORA-22 PM R0.7/R3.8 / 12-ORA-22 PM R0.5/R0.7
12-ORA-73 PM R27.2/R27.8 / 12-ORA-605 PM 3.5/R1.6
07-LA-605 PM R0.0/R1.2
EA: 0H1000

This Record of Decision (ROD) was developed pursuant to 40 Code of Federal Regulations (CFR) 1505.2 and 23 CFR 771.127. The California Department of Transportation (Caltrans), in cooperation with the Orange County Transportation Authority (OCTA) has identified the need to improve the mainline freeway and interchanges on Interstate 405 (I-405 or San Diego Freeway) to relieve congestion and improve operational efficiency between State Route (SR)-73 and Interstate 605 (I-605). The approximately 16 mile-long project corridor is primarily located in Orange County on I-405 and traverses the cities of Costa Mesa, Fountain Valley, Huntington Beach, Westminster, Garden Grove, Seal Beach, Los Alamitos, Long Beach, and the community of Rossmoor.

The project's purpose and need are described in detail in Chapter 1 of the I-405 Improvement Project's Final Environmental Impact Statement (FEIS) approved on March 26, 2015, and are discussed below. The Notice of Availability for the FEIS was published in the Federal Register on April 3, 2015, and a 30-day review period closed on May 4, 2015.

The environmental review, consultation, and any other action required in accordance with applicable federal laws for this project is being, or has been, carried out by Caltrans under its assumption of responsibility pursuant to 23 United States Code (USC) 327.

A. Decision

This ROD approves the Preferred Alternative identified in the FEIS (Alternative 3). After public review of the Draft Environmental Impact Report/Environmental Impact Statement (DEIR/EIS), the Supplemental DEIR/EIS and full consideration of the technical studies prepared, public comments, and agency input, and after comments on the FEIS were considered, Caltrans has selected Alternative 3 for the widening and improvement of the I-405 corridor. This was based on the ability of this alternative to meet the project purpose and need; travel time savings; consistency with system planning; environmental impacts; funding availability; community input; and coordination with regulatory agencies and local stakeholders including Orange County, Los Angeles County, and the cities of Costa Mesa, Fountain Valley, Huntington Beach, Westminster, Garden Grove, Seal Beach, Los Alamitos, Long Beach, and the community of Rossmoor.

B. Purpose and Need

The project purpose is a set of objectives the project is intended to meet. The project need is the range of transportation deficiencies that the project was initiated to address.

Purpose

The purpose of the proposed action is to:

- Reduce congestion;
- Enhance operations;
- Increase mobility, improve trip reliability, maximize throughput, and optimize operations; and
- Minimize environmental impacts and right-of-way (ROW) acquisition.

In furtherance of the project's purpose, the following objective is established:

- To be consistent with regional plans and find a cost-effective early project solution for delivery.

Need

Current deficiencies of I-405 within the project limits are summarized below:

- The I-405 mainline general purpose (GP) lanes peak-period traffic demand exceeds available capacity;
- The I-405 mainline high-occupancy vehicle (HOV) lanes peak-period traffic demand exceeds available capacity;
- The I-405 mainline GP traffic lanes have operational and geometric deficiencies;
- The interchanges along I-405 within the study area have geometric, storage, and operational capacity deficiencies; and
- I-405 currently has limitations in detecting traffic incidents and providing rapid response and clearance due to lack of capacity and technological infrastructure.

C. Alternatives Considered

Selected Alternative (Alternative 3)

Alternative 3 includes the addition of one GP lane in each direction on I-405 from Euclid Street to the I-605 interchange, plus the addition of a tolled Express Lane in each direction of I-405 from SR-73 to SR-22 East. The tolled Express Lane and the existing HOV lanes would be managed jointly as a tolled Express Facility with two lanes in each direction from SR-73 to I-605. Access to the tolled Express Lane Facility from SR-22 and I-605 would be via the HOV direct connectors constructed as part of the SR-22 West County Connectors (WCC) Project.

The objective is to open the tolled Express Lanes with HOVs (or carpools) having 2 or more occupants free of charge to encourage rideshare and transit usage. Operational adjustments to the tolled Express Lanes may be implemented based on demand, rates of speed, traffic volumes, and to meet financial covenants, maintenance and operational obligations. Potential operational adjustments include, but are not limited to:

- adjusting to HOV3+ free with HOV2s paying discounted tolls
- adjusting to HOV3+ free with HOV2s paying full tolls

- adjusting to tolling HOV2s on individual tolling segments such as direct connectors to or from other freeways
- periodic adjustments of tolling rates to maintain operations on individual tolling segments

The Express Lane Facility would be monitored to adjust toll amounts to ensure that all user groups (i.e., HOVs, buses, and single-occupancy vehicles) of the Express Lanes experience free-flow conditions with less congestion and more throughput per lane than the GP lanes during peak hours. The Express Lanes provide an option to users to obtain increased reliability in travel time, an option that currently does not exist on I-405. The Express Lanes would encourage carpooling by initially providing free passage for HOV 2+ and for HOVs with 3 or more occupants in the future.

To facilitate access to the Express Lane Facility, the following seven access points are currently proposed:

- I-405 south of the SR-73 junction, by an at-grade access;
- SR-73, south of the I-405 junction by a direct connector;
- I-405 in the Magnolia Street/Warner Avenue area, by an at-grade access;
- I-405 in the Bolsa Avenue/Goldenwest Street area, by an at-grade access;
- SR-22 east of the I-405 junction, by a direct connector;
- I-605 north of the I-405 junction, by a direct connector; and
- I-405 north of the I-605 junction, by at-grade access.

The tolling and signage infrastructure needed to operate the tolled Express Lanes would include:

- Toll gantries (toll reader) with transponder readers and high-speed digital cameras in illuminated areas at approximately 18 locations (9 in each direction);
- Enforcement areas at approximately 8 toll gantry locations (4 in each direction);
- Signage approaching Express Lane entry and exit points, including variable message signs upstream of entry points indicating the toll amount;
- Complete closed-circuit television coverage of the entire Express Facility to provide security for tolling equipment and to enable quick response to breakdowns and other incidents in the Express Lanes; and
- Fiber optics linking the electronic infrastructure to a centralized toll operations office.

The policies governing operation of the Express Lanes in Alternative 3 are additional features unique to this alternative. The addition of the tolled Express Lanes in the Selected Alternative is a TDM feature in and of itself. These additional lanes provide additional capacity for HOV users (including public transit buses and vanpools) and are used as a sustainable transportation system management strategy. They are used to promote carpooling and transit patronage, improve travel time reliability, reduce greenhouse gas emissions, and maximize the efficiency of a freeway by increasing person and vehicle throughput while reducing congestion and delay. The pricing component of the lanes provides the ability to actively manage demand and incentivize ridesharing and transit.

Under Alternative 3, a northbound auxiliary lane will be provided between the Seal Beach Boulevard on-ramp and the SR-22/7th Street off-ramp.

At Bolsa Avenue/Goldenwest Street and at Magnolia Street/Warner Avenue, an additional weaving lane

between the #2 Express Lane and the #1 GP lane would accommodate adjustments in speed between these lanes. It would accommodate motorists entering and exiting the Express Lanes to adjust their higher speed between the #2 Express Lane and the lower speed #1 GP lane.

The tolled Express Lane Facility would be separated from the GP lanes by a 2-ft to 4-ft buffer. Twelve mandatory and 17 advisory design standards would require design exceptions at one or more locations along the corridor.

There are existing noise barriers on the both sides of the I-405 mainline within the project limits. Eighteen new, 22 replaced in-kind, 7 replaced in-kind (higher), and 6 gap closure soundwalls will be built.

There are 115 known utility facilities anticipated to be impacted by Alternative 3.

Construction vehicle access and staging of construction materials will occur within the existing right- of-way or the additional right-of-way acquired for the project. Vehicle access and materials staging during construction of walls outside of and immediately adjacent to the State right-of-way will occur in approved designated areas. All construction vehicle access, materials staging and storage, and other construction activities will occur within the defined disturbance limits.

The project may be implemented in phases and/or segments and procured under one or more contracts, including the option of using design/bid/build, design-build or public/private contract authority.

Additional Alternative 3 project improvements are as follows (also common to Alternatives 1 and 2):

- One GP lane would be added in each direction of I-405 from Euclid Street to the I-605 interchange.
- The existing northbound auxiliary lane from the Magnolia Street on-ramp to the Beach Boulevard off-ramp would be retained.
- A northbound auxiliary lane would be provided approaching the Euclid Street off-ramp to provide a two-lane exit.
- The southbound auxiliary lane currently provided approaching the Harbor Boulevard off-ramp would be extended to start at the Euclid Street on-ramp.
- The existing southbound auxiliary lane from the Beach Boulevard on-ramp to the Magnolia Street off-ramp would not be retained.
- Travel lanes on the I-405 mainline would generally be 12 foot wide, and right side shoulders would generally be 10 foot wide.
- Due to the added travel lanes and shoulder widths proposed on the I-405 mainline, 17 local street overcrossings and a pedestrian bridge over I-405 within the project limits would require complete replacement because the existing bridge spans are inadequate to accommodate the additional proposed width of the freeway underneath the bridges. Each of the replacement (new) local street overcrossings would be designed to accommodate the ultimate cross-section width and maximum number of travel lanes planned for each facility in the Orange County MPAH.
- The Euclid Street/Ellis Avenue undercrossing bridge would be modified and widened as part of the proposed project.
- Two railroad overheads would be modified as part of the proposed project. The freeway passes over the Union Pacific Railroad (UPRR) on the Bolsa Overhead (Bridge No. 55-269 at PM 17.21)

and the U.S. Navy Railroad on the Navy Overhead (Bridge No. 55-272 at PM 18.36). Both railroad overheads would be widened. Required railroad clearances would be maintained and a crash cushion would be installed at the UPRR overhead.

- Improvements at each interchange within the project limits are proposed. Generally, each interchange improvement would have the following standard features:
  - Left- and right-side shoulders on on-/off-ramps;
  - Increased on-ramp storage capacity for ramp meters;
  - Removal of HOV bypass lanes from on-ramps;
  - Increased off-ramp storage capacity at local street intersections; and
  - Additional through and turn lanes at intersections of ramps and local streets.
- Interchanges would be reconfigured at Euclid Street, Ellis Avenue, Brookhurst Street, Magnolia Street, Warner Avenue, Beach Boulevard, and Westminster Avenue. The Euclid Street/Ellis Avenue interchange would be improved with construction of a new southbound I-405 on-ramp from eastbound Ellis Avenue. Due to comments received during the Draft EIR/EIS and Supplemental Draft EIR/EIS regarding the braided ramps at Magnolia/Warner, the northbound and southbound Magnolia and Warner braided ramp design options were removed from consideration. As a result, a design option was proposed in the southbound direction and the three businesses that were previously identified as full acquisitions will no longer be acquired. An auxiliary lane in the southbound direction would be used to minimize right of way impacts to the commercial business center. In the northbound direction, the use of a collector distributor system instead of the braided ramp configuration would provide similar operational performance for the freeway operations.
- Pedestrian facilities, such as sidewalks and/or crosswalks, and Class 2 bike lanes as appropriate, would be provided on overcrossings and along arterials within interchanges.
- Maintenance vehicle pullouts (MVP) would be included in various locations under each build alternative.
- Relocation of existing utilities (e.g., electrical lines, irrigation water supply lines, underground natural gas pipelines, telecommunication lines) would be required for utilities currently present within the I-405 ROW limits.
- Modification of existing stormwater drainage channels and construction of new drainage and/or retention facilities would be necessary to accommodate project construction and provide sufficient drainage capacity to accommodate future runoff volumes generated with the built project in place.
- Water quality Best Management Practices (BMPs) would be added.
- At various locations, new or reconstructed soundwalls and retaining walls would be constructed. Replacement walls would be constructed in areas where sections of existing walls must be modified to accommodate the proposed project. Soundwall extensions would also be necessary to close gaps created by the project's removal of embankment material at some freeway overpasses.
- Landscaping and hardscaping elements would be included.
- Due to ROW constraints and existing nonstandard features, design exceptions would be included. Examples of such design exceptions include:

  - Nonstandard super-elevation rates on new grades for ramps.
  - Lengths of transitions on ramps for either shortened or tightened ramps.
  - Nonstandard longitudinal grades at existing tie-ins for ramp tie-ins into the mainline to match the mainline grade.
  - Access control for spacing from ramp to existing driveways for businesses.
- ADA-compliant pedestrian facilities, such as sidewalks and/or crosswalks, as appropriate, would be provided on arterials within the project limits.
- The right of way line would be fenced with a 6-ft chain link fence where walls do not provide a boundary. Lighting would be provided on standard poles concentrated at the interchanges, but also spaced along the facility at approximately two hundred feet intervals.
- Although Transportation System Management (TSM) and Transportation Demand Management (TDM) measures alone do not satisfy the purpose and need of the project, the following TSM and TDM measures would be incorporated in the proposed project:
  - Transit vehicles (including buses and vanpools) would continue to use the HOV lanes under Alternative 1 and 2 and would be able to use the Express Tolled Facility at no cost.
  - Improved ramp metering hardware and software and closed circuit television systems for viewing ramps and nearby arterials would be provided;
  - At locations of interchange improvements, upgraded traffic signals would be interconnected and coordinated with adjacent signals and ramp meters;
  - Additional way-finding signs on freeways and arterials would be included;
  - Design of on- and off-ramps would limit impacts to non-motorized travel and preserve access to bike lanes and trails such as the Santa Ana River bike trail;
  - Intelligent Transportation Systems (ITS) elements would include: fiber-optic and other communication systems for improved connectivity and remote management; changeable message signs; closed-circuit television coverage of the entire freeway mainline, ramps, and adjacent arterials; video detection systems; and vehicle detection systems for volume, speed, and vehicle classification;
  - Advanced Traffic Management System improvements to the hardware and software systems at the Caltrans District 12 Traffic Management Center would be provided; and
  - Traveler Information Management System improvements would enhance dissemination of real-time information on roadway conditions.

Rationale for Identification of the Selected Alternative

This section identifies the Selected Alternative, as well as the rationale and process used in its identification. The Preferred Alternative (PA) recommended by the Project Development Team (PDT) on July 24, 2014, was Alternative 3 which would add one GP lane plus one tolled Express Lane in each direction, with the tolled Express Lane and the existing HOV lane managed jointly as a tolled Express Facility.

This PA identification was made after considering all information in the Draft Environmental Impact Statement (DEIS), Supplemental DEIS, and technical studies. It was also based on extensive input from the internal PDT members, public, stakeholders, interested citizens, cooperating agency Army Corps of Engineers (ACOE), participating agencies, federal, state, regional, and local agencies during the project

development process. Extensive public outreach/coordination resulted in comments from the public and agencies; all comments were carefully considered during the PA process. Consideration was given to all issues raised, including the complexity of the project, funding, public concerns, project purpose and need as well as the project's environmental/economic/social impacts (described in Chapter 3 of the FEIS), and the PA's evaluation criteria, which also included a balancing of the following factors:

- Reduce congestion on GP/HOV lanes
- Enhance & optimize operations
- Increase mobility
- Improve trip reliability
- Maximize throughput
- Minimize environmental impacts and ROW acquisition
- Address peak-period traffic demand that exceeds capacity in GP & HOV lanes
- Address mainline operational & geometric deficiencies
- Address interchange deficiencies
- Address limitations in technological infrastructure

All three Build Alternatives would meet the project's purpose and need by reducing congestion; enhancing operations; increasing mobility; improving trip reliability, maximizing throughput, and optimizing operations; and minimizing environmental impacts and right of way acquisitions. The No Build Alternative would not meet the project purpose and need.

The three Build Alternatives would generally have similar social and economic impacts with Alternative 3's impacts being slightly more than Alternative 2, and Alternative 2's being slightly more than Alternative 1's impacts. The avoidance, minimization, and mitigation measures would also be generally similar for most resource areas.

During the PA identification process, it was noted that the cities within the corridor supported adding one GP lane but had general opposition to tolling, as the DEIS proposed that HOV2s (vehicles with 2 persons) would pay a fee to use the toll facility.

The PDT concluded that although environmental/social/economic impacts were generally similar for all three Build Alternatives, benefits pertaining to throughput of persons and vehicles; maximizing performance of the existing system; trip reliability; and long-term congestion relief were substantially different for the three build alternatives.

Increased vehicle throughput for build alternatives, mobility for 2040 by peak hour throughput, average daily traffic, and travel-time savings for all Alternatives is presented in the table below.

The table below supports the conclusion that Alternative 3, the PA, is the most beneficial overall as compared to Alternative 1 and 2. The PA also best fulfills the purpose and need of the project; by providing managed lanes along an important travel corridor with free-flow conditions for future decades, access along the corridor will be greatly enhanced. This improvement, via managed lanes, would provide major benefits for the communities along the corridor by encouraging HOVs and transit bus services and enhancing emergency vehicle access. With free-flow conditions for such vehicles, livability along the corridor would be improved as lanes would be able to better serve the community. Air quality improvements associated with reduced congestion could improve health.

All build alternatives would result in operational improvements. However, Alternative 3 has lower travel times and higher travel speeds as compared to Alternatives 1 and 2. Alternatives 1 and 2 have higher travel times and lower travel speeds due to less capacity. General purpose lanes will not deliver service life for the design year as demand exceeds capacity. But managed lanes can preserve mobility beyond the design year.

Mobility by Alternatives (2040)

	No Build	Alt 1	Alt 2	Alt 3 (Selected Alternative)
Increased vehicle throughput	N/A	• 0% SR - 73 to Brookhurst Street • 20% between Brookhurst Street and SR-22 East; & • 13% between SR-22 East and I-605.	• 0% SR - 73 to Brookhurst Street • 40% between Brookhurst Street and SR-22 East; & • 25% between SR-22 East and I 605.	• 24% SR - 73 to Brookhurst Street • 50% between Brookhurst Street and SR-22 East; & • 23% between SR-22 East and I-605.
Peak Hour Throughput (potential, one direction)	6,000 vehicles per hour	7,200 vehicles per hour	8,400 vehicles per hour	9,500 vehicles per hour
Average Daily Traffic	324,000 – 489,000	334,000 – 499,000	344,000-509,00	348,000 – 503,000
Average Travel Time SR-73 to I-605 weighted by volume (Northbound, PM Peak Period)	130 min	56 min	28 min	23 min

Although, the construction costs would be higher for Alternative 3 (due to construction of the direct connector to SR-73) as compared to Alternatives 1 and 2, the revenue generation from toll collection, the long-term operational benefits, transit/carpool encouragement, reduced weaving, travel time reliability and potential congestion relief downstream due to increased use of SR-73 rather than I-5, would outweigh the increased construction costs of the Selected Alternative. Additionally, the trip reliability for transit/carpools would be enhanced because they would be able to utilize the tolled Express Lane Facility, as opposed to being forced to use the GP lanes with their attendant trip time uncertainty.

After comments were received from the public and reviewing agencies on the DEIS and Supplemental DEIS, Caltrans performed additional environmental and engineering analysis, which is included in Appendices R1 and R2 of the FEIS. Analyses that resulted in unacceptable conditions were not carried forward in the FEIS. Those that resulted in acceptable conditions are carried forward in the FEIS, were part of the PA decision making process, and are presented below:

Elimination of Braided Ramps: A large number of public comments were received regarding the southbound and northbound braided ramps at Magnolia/Warner. The southbound braided ramps would result in full acquisitions of the Sports Authority, Days Inn, and the Fountain Valley Skating Center. A design option was proposed that removed the braided ramps and would not permanently impact the business properties on the freeway side. In lieu of the southbound braided ramp configuration, the Magnolia Street loop on-ramp would terminate at I-405 into a new auxiliary lane adjacent to the GP lanes and accommodate traffic exiting I-405 onto the Warner Avenue loop off-ramp. The auxiliary lane would terminate south of the off-ramp to Warner Avenue and avoid ROW impacts south of the Warner Avenue interchange. Provision of an auxiliary lane from the Magnolia Street on-ramp to the south and extending beyond the Warner Avenue off-ramp represents an improvement over the existing condition. In the northbound direction it was concluded that a collector distributor (C-D) road, instead of a braided ramp, configuration would provide better performance than existing conditions. The FEIS proposes keeping the C-D road and auxiliary lane to avoid impacts to the properties.

Open Toll Express Lanes with HOV2s Free: There was general opposition from the public, as well as from some local agencies along the corridor, to tolling HOV2s (HOVs with 2 occupants). As a result, Caltrans intends to open the Express Lanes with HOV2s and 2+ free, retaining the flexibility to adjust to HOV3+ free with HOV2s tolled or discounted based on consideration of various factors. These include, but are not limited to occupancy requirements of adjacent HOV/HOT facilities and available capacity if HOV2+ vehicles are allowed into the lanes.

Due to all of the reasons mentioned above, the PDT reached a consensus and Alternative 3 was identified as the Preferred Alternative. This document identifies Alternative 3 as the Selected Alternative to move forward for design and construction.

Alternative 1

Alternative 1 would add a single GP lane in each direction on I-405 from Euclid Street to the I-605 interchange. Alternative 1 would provide continuous access between the HOV and GP lanes. Continuous access would allow entrance to and exit from the HOV lanes along the entire length of the HOV lanes.

In the northbound direction, auxiliary lanes would be added at various locations to provide efficient merge and diverge operations including one northbound between the Seal Beach Boulevard on-ramp and the SR-22/7th Street off-ramp.

In the southbound direction, the existing auxiliary lane from the SR-22/7th Street on-ramp to Seal Beach Boulevard and the existing auxiliary lane from the Harbor Boulevard on-ramp to the Fairview Road off-ramp would be retained.

In the northern section of the project area where SR-22 and I-405 overlap, Alternative 1 would result in a freeway with 9 to 10 lanes in each direction. Signage would be provided far enough upstream to accommodate the required number of lane changes to exit the freeway for traffic in the left lanes, including the HOV lanes.

Other project improvements are similar to project features described in the Selected Alternative discussion above.

Alternative 2

Alternative 2 would add one GP lane in each direction on I-405 from Euclid Street to the I-605 interchange (as in Alternative 1), plus add a second GP lane in the northbound direction from Brookhurst Street to the SR-22/7th Street interchange and a second GP lane in the southbound direction from the Seal Beach Boulevard on-ramp to Brookhurst Street.

In the northbound direction, auxiliary lanes would be added at various locations to provide efficient merge and diverge operations including one between the Euclid Street/Ellis Avenue on-ramp and the Brookhurst Street off-ramp.

In the southbound direction, the existing auxiliary lane from the SR-22/7th Street on-ramp to Seal Beach Boulevard and the existing auxiliary lane from the Harbor Boulevard on-ramp to the Fairview Road off-ramp would be retained. In the northern section of the project area where SR-22 and I-405 overlap, Alternative 2 would result in a freeway with 9 to 10 lanes in each direction. Signage would be provided far enough upstream to accommodate the required number of lane changes to exit the freeway for traffic in the left lanes, including the HOV lanes.

Other project improvements are similar to project features described in the Selected Alternative discussion above.

No Build Alternative

Under the No Build Alternative, no improvements would be made to the I-405 corridor within the project limits by the proposed project. No additional lanes or interchange improvements would be provided. The No Build Alternative configuration would not accommodate existing or future traffic demand, and existing nonstandard geometric features would not be corrected. Congestion along the corridor would not be alleviated, and the situation would continue to deteriorate with time.

The No Build Alternative provides a condition for comparing impacts associated with the build alternatives because environmental review must consider the effects of not implementing the proposed project. This alternative is inconsistent with the Caltrans goal of providing an efficient and effective interregional mobility system. Other direct effects of the No Build Alternative would include continued deterioration of freeway and local interchange operations and increases of emissions and maintenance costs associated with inefficiencies. Indirect and cumulative effects of the No Build Alternative could include increased effects on the communities related to increased commute times and traffic diversion through adjacent neighborhoods. Additionally, the No Build Alternative could increase the total amount of time the corridor cities have to endure construction-related effects associated with addressing the corridor needs through many smaller projects completed over an extended period of time.

D. Section 4f

As discussed in the FEIS in detail in Appendix B, Resources Evaluated Relative to the Requirements of Section 4(f), Alternative 3 would affect several Section 4(f) properties:

Pleasant View Park

- Permanent acquisition of a 1,210 square foot (sq/ft) area of the park, approximately 1 percent of

Pleasant View Park.

- Direct use area within the park would be acquired for project ROW and converted to transportation uses; however, the area consists of landscaping and does not contain recreation facilities or fields.
- 800 sq/ft temporary construction easement (TCE) is anticipated in order to construct a new soundwall in this area, but would not affect existing previously described recreational activities, features, and attributes in the park because this use would occur only where landscaping is located.

The Department has determined that a *de minimis* finding applies because the direct use area would not affect any of the recreational activities, features, or attributes within the park because none are located in the direct use area. Construction of the proposed project would not result in a temporary use of the park because recreational activities can continue throughout project construction. Therefore, the proposed project would not result in a temporary use of the park under Section 4(f). The proposed project would not result in a Section 4(f) constructive use of the park due to indirect noise and air quality impacts.

The City of Huntington Beach concurred with the De Minimus Determination on October 23, 3012.

Buckingham Park

- Permanent acquisition of 3,151 sq/ft (less than 1 percent of total park area) area located on an earthen berm that has no recreational function nor provides access to the park. No conversion of recreational use to transportation will be required because this area is currently a portion of the Edwards Street ROW.

The Department has determined that a *de minimis* finding applies because construction of the proposed project would reconfigure Edwards Street and have no effect on recreational activities, facilities, or attributes in the park.

The City of Westminster concurred with the De Minimus Determination on November 5, 2012.

Cascade Park

- Permanent acquisition of 4,152 sq/ft along the northern edge of the park is anticipated in order to replace an existing chain-link fence with a soundwall.
- 3,500 sq/ft TCE anticipated for construction of a new northern park fence along the southbound on-ramp. The TCE area consists of landscaping and does not include recreational facilities or fields.

The Department has determined that a *de minimis* finding applies because the acquisition area would affect an existing fence and drainage canal and would not affect recreational activities, features, or attributes associated with Cascade Park. Additionally, because the construction area noted above would not affect the previously described facilities, the associated recreational activities, features, and attributes of the park would not be adversely affected by the proposed project. Construction of the proposed project would not interrupt recreational activities; therefore, there would be no temporary use of Cascade Park under Section 4(f).

The City of Westminster concurred with the De Minimus Determination on November 5, 2012.

Off Road Bike Trails

- Approximately 2,000 sq/ft of overhead concrete would be added to the existing trail, resulting in a direct use of the Santa Ana River Trail.
- Construction of the new Euclid Street southbound I-405 on-ramp from Ellis Avenue would occur above the trail and is anticipated to require an approximately 1,700 sq/ft TCE. The trail on the western and eastern banks of the Santa Ana River would likely need to be closed temporarily during construction, resulting in a temporary loss of recreational use of the trail.

The Department determined that a *de minimis* finding applies because the direct use area would not affect any of the recreational activities, features, or attributes of the trail because the direct use area is above the trail. Additionally, because one of the trails would be closed temporarily during construction of the Euclid Street southbound I-405 on-ramp from Ellis Avenue, the proposed project would result in a temporary use of the trail under Section 4(f). As noted, Alternative 3 would result in the temporary closure of the Santa Ana River Trail, one riverbank trail at a time, during the phased construction of the Euclid Street southbound I-405 on-ramp from Ellis Avenue. Access would remain for at least one riverbank trail at all times, but there would be temporary overall reduction of access to the trail system during construction. The indirect impacts to access to the Santa Ana River Trail would be temporary and thus not a Section 4(f) constructive use.

The County of Orange concurred with the De Minimus Determination on December 9, 2012.

E. Summary of Beneficial Environmental Impacts

The Selected Alternative will enhance the movement of people and goods, public safety and security through the improvement of driving conditions on the I-405 and also improve travel times and speeds, provide consistency with system planning, and reductions of regional vehicle emissions.

The proposed I-405 improvement project will improve projected future traffic operations. The Selected Alternative will result in better roadway operations and intersection operations in the year 2040 compared to operations projected for 2040 without construction of the project, which will reduce traffic congestion, improve operations, reduce travel times along the corridor and local roadways connected to freeway, promote carpooling and transit patronage, reduce greenhouse gas emissions, and maximize the efficiency of the freeway by increasing person and vehicle throughput. The toll pricing provides the ability to actively manage demand and encourage ridesharing and transit.

The improvement of the I-405 corridor is recognized in local planning documents and is mainly limited to the available right of way to the maximum extent possible along the corridor from southern to the northern end of the I-405 within the project limits. The project is a transportation improvement that is consistent with the Orange County Master Plan of Arterial Highways (MPAH) which ensures a countywide coordinated transportation system among local jurisdictions. The project is mainly consistent with the goals and policies in the land use, mobility, and conservation and open space elements of the corridor cities' General Plans. The PA is also consistent with the 2012 Regional Transportation Plan (RTP), the 2015 Federal Transportation Improvement Program (FTIP), the OCTA's 2009 Commuter Bikeways Strategic Plan, and SCAG's Compass Growth Visioning Plan.

The project will increase speed and reduce travel times by providing toll Express Lanes with seven access points. Additionally, the project will provide 10-ft wide shoulders along the corridor that will provide

better sight distance and additional pavement for California Highway Patrol (CHP) and other vehicles to pull over in emergencies.

Pedestrian sidewalks and crosswalks along both sides of major arterials crossing I-405 within the project limits will be provided to accommodate pedestrian traffic. Pedestrian facilities along both sides of the street are proposed for 13 of the 17 arterials crossing I-405. To improve accessibility and safety for pedestrians and motorists, sidewalks and ramps will be in compliance with California state laws and federal Americans with Disabilities Act (ADA) regulatory standards. Existing sidewalks will be maintained, upgraded, or relocated as needed for accessibility.

There would be a general improvement in air quality. The project's future emissions (2020 and 2040) would be less than existing for VOC, NOx, and CO and higher than existing for SOx, $PM_{2.5}$, and PM_{10}. However, all of its emissions would be less than the future emissions under the No Build Alternative. Furthermore, the Selected Alternative is estimated to have greenhouse gas emissions of 1,538 tons per day by 2020 as compared to the No Build Alternative with 2,151 tons per day. The Selected Alternative is further estimated to have greenhouse gas emissions of 1,825 tons per day by 2040 as compared to 3,509 tons per day by 2040 for No Build Alternative (Supplemental Air Quality Report).

F. Summary of Adverse Impacts and Measures to Minimize Harm

The project will have construction and operational impacts. Chapter 3 of the FEIS provides a detailed discussion of potential impacts resulting from the project and identifies specific measures to avoid, minimize and mitigate impacts. Adverse impacts and measures are summarized below.

Land Use

Potential Impacts

- Permanent conversion of 4.90 acres of land designated in local General Plans for uses other than transportation.
- Temporary use of 260 parcels for TCEs
- 1,210 square feet of permanent impacts to Pleasant View Park
- 3,151 square feet of permanent impacts to Buckingham Park
- 4,152 square feet of permanent impacts to Cascade Park
- 2,000 square feet of permanent impacts to Santa Ana River Trail
- 800 square feet of temporary impacts to Pleasant View Park for TCE
- 3,500 square feet of temporary impacts to Cascade Park for TCE
- 1,700 square feet of temporary impacts to Santa Ana River Trail for TCE

Measures to Minimize Harm Related to Land Use

- Standard measures will be used, including implementing a Transportation Management Plan (TMP) throughout the duration of construction activities and replace any existing vegetation damaged or removed during construction.
- General Plans will be amended to reflect the land use designations for the Selected Alternative.
- Pedestrian access shall be maintained via detour at Pleasant View Park at all times during construction of the project.
- Phased construction will provide access to the Santa Ana River Trail during construction.

- Compliance will be maintained with the provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act) when property is acquired.

Community Impacts

Potential Impacts

- Loss of up to 46 parking spots out of 1,489
- Acquisition of 109 partial parcels based upon preliminary data, totaling to 4.9 acres.
- Parking may be temporarily impacted as a result of the detour routes
- Direct/Indirect generation of about 42,000 jobs
- Temporary closure of ramps and arterial overcrossings will occur to accommodate staged construction

Measures to Minimize Harm Related to Community Impacts

- Standard measures will be used, including refraining from closing two consecutive/adjacent off-ramps or on-ramps in the same direction concurrently, maintaining business access at all times during construction, providing motorists information (i.e., existing changeable message signs, portable changeable message signs, stationary ground-mounted signs, traffic radio announcements, and the Caltrans Highway Information Network [CHIN]), and implementing alternate and detour routes during construction.
- Ramps that provide access immediately adjacent to major commercial business will not be closed from November 1 to January 31.
- Coordination with the relevant parks and recreation departments of affected parks shall occur during construction.
- Coordination with utility service providers and the implementation of a public outreach program will be conducted.
- Close coordination with railroad owners and operators will be conducted during final design and construction phases.
- OCTA and Caltrans shall work closely with affected property owners.
- Good public relations with the community will be maintained.
- The existing Heil Avenue pedestrian crossing will remain open for use until the replacement crossing has been completed.
- OCTA and Caltrans will comply with the provisions of the Uniform Act.
- Caltrans and OCTA commit to working with the City of Costa Mesa to minimize impacts to the extent practicable through continuous coordination.
- Caltrans and OCTA commit to working with the City of Seal Beach to minimize impacts to the extent practicable through continuous coordination. This includes striving to meet minimum City street standards and ensuring that any improvements meet the requirements of the Americans with Disabilities Act and provide safe passage for emergency service vehicles.

Utilities/Emergency Services

Potential Impacts

- Relocation, removal, or protection in-place of approximately 115 utility lines or facilities

Measures to Minimize Harm Related to Land Use

- Utility providers will be made aware of project developments and will be involved in the planning of utility rerouting, identification of potential conflicts, and the formulation of strategies.
- Emergency service providers will be alerted in advance of any temporary road closures and delays.

Traffic and Transportation/Pedestrian and Bicycle Facilities

Potential Impacts

Permanent impacts to local intersections.

- During construction, complete closures of ramps or connectors for certain periods of time or on weekends.
- Temporary sidewalk and bicycle closures at certain crossings during construction.
- Mainline improvements would also necessitate construction of up to 8 new structures, 18 structure replacements, and 6 structure widening/modifications.
- Temporary closure of bikeway beside the Santa Ana River.

Measures to Mitigate Harm Related to Traffic and Transportation/Pedestrian and Bicycle Facilities

- A Traffic Management Plan (TMP) will be prepared.
- During final design, plans shall be prepared to incorporate improvements at the Slater Avenue/Brookhurst Street intersection, Talbert Avenue/Brookhurst Street intersection, Warner Avenue/Magnolia Street intersection, McFadden Avenue/Beach Boulevard intersection, Center Avenue/Beach Boulevard intersection, Edinger Avenue/Beach Boulevard intersection, Bolsa Avenue/Goldenwest Street intersection, and the Garden Grove Boulevard and Bolsa Chica Road/Valley View Street intersection that the contractor shall implement during construction.
- A fair share percentage payment, as disclosed in the FED, shall be made by OCTA and Caltrans (if phased) to the City of Long Beach and Caltrans.
- A process will be developed to address the potential operational challenges under the HOV2+ free occupancy policy.

Visual/Aesthetics

Potential Impacts

- Removal of vegetation along the I-405 mainline
- About 18 percent increase of pavement within ROW
- 8 new structures, 18 structure replacements, and 6 structure widening/modifications
- Addition of 20 new soundwalls, replacement of 7 soundwalls with greater height, replacement of 22 soundwalls in-kind, and 6 gap closure soundwalls
- Increase in slope of local streets approaching bridge crossings
- Possible increase of graffiti in proposed permanent structures
- Temporary impacts on vegetation caused by the removal of the eucalyptus trees and other vegetation

Measures to Mitigate Harm Related to Visual/Aesthetics

- Use standard measures, including protecting, relocating, and, if necessary, replacing vegetation in conflict with proposed improvements, providing a plant establishment period, and using glare shields wherever possible to reduce lighting impacts.
- Beginning with preliminary design and continuing through final design and construction, plan, save, protect, and re-vegetate as much existing vegetation in the corridor, especially eucalyptus and other skyline trees, as feasible.
- Survey exact locations for existing trees and vegetation to include in plans.
- Protect with temporary fencing large infield areas of existing plantings to be preserved.
- Locate maintenance access drives in unobtrusive areas away from local streets.
- Design all visible concrete structures and surfaces (include but not limited to aesthetic treatment to soundwalls/retaining walls, biostrip/bioswale vegetation and design, water treatment basin design, etc…) to adhere to the Aesthetic and Landscape Master Plan when developed.
- Design rock slope protection to consist of aesthetically pleasing material with a variety of sizes.
- Limit the use of bioswales within corridor landscape areas.
- Implement maintenance programs for the control and removal of graffiti.
- If feasible, include vine planting with all sound barrier projects.

Cultural Resources

Potential Impacts:

- A minimal increase in existing audible, visual, or atmospheric impacts to historic properties or resources may result from indirect impacts.
- Temporary detour routes are anticipated through resource areas. Impacts are minimal because the detours will use an already heavily traveled arterial roadway network.
- Temporary signage may be implemented to direct detours.

Measures to Mitigate Harm Related to Cultural Resources

- Standard measures will be used including halting work in the vicinity of any previously known or unknown buried cultural materials unearthed during construction until a qualified archaeologist can assess the significance of the materials, and if human remains and associated artifacts are encountered during ground-disturbing activities, then the provisions of Public Law 101-601, Section 5097.98 and .99 of the PRC, and Section 7050 of the Health and Safety Code, will be followed.
- If any buildings and/or structures in the project APE are determined eligible for listing in the NRHP subsequent to finalizing the FEIS, then such buildings and/or structures shall not be destroyed or significantly altered as part of construction of this project. Proper coordination shall be undertaken with the entity responsible for such listing.
- Qualified cultural resources staff shall provide monitoring activities during construction.

Hydrology/Water Quality

Potential Impacts:

- Discharge to both lined and unlined channels will occur.

- 2 floodplains will experience longitudinal encroachments located at the Edinger Storm Channel and the Bixby Storm Channel. Floodplain encroachments will minimally affect the Base Flood Elevations (BFE).
- Increase in pollutants and runoff is expected with the implementation of an additional 104 acres of impervious surface.
- 432 acres of disturbed soil is expected.

Measures to Mitigate Harm Related to Hydrology and Water Quality:

- Standard measures will be used, including ensuring compliance with provisions of the Caltrans Statewide (NPDES) Storm Water Permit, the General NPDES Permit for Construction Activities and the General Waste Discharge Requirements Permit, that include preparing and implementing a Stormwater Pollution Prevention Plan (SWPPP) addressing all State and federal water control requirements and regulations relating to construction, equipment, and materials; and provide Maintenance, Design Pollution Prevention, and Treatment BMPs to meet Maximum Extent Practicable (MEP) requirements.
- Project design elements will include bridge pier alignment paralleling the direction of flow to minimize flow obstruction.
- Bridges will be designed with sufficient freeboard above the 100-year water surface elevation.
- In-river construction and post construction shall include erosion control and water quality protection.
- Adequate conveyance capacity will be provided at bridge crossings.

Geology, Soils, Seismic, and Topography:

Potential Impacts

- Temporary manmade fills will be placed over alluvial soils
- Potential exists to permanently result in or be affected by ground motion, liquefaction, fault rupture, and other effects related to seismic activity; retaining walls for slope stability; and erosion of slopes and other unpaved areas
- The project may temporarily result in or be affected by increased potential for soil erosion in areas of disturbed soil; ground motion, liquefaction, fault rapture, and other effects related to seismic activity; retaining walls for slope stability; and erosion of slopes and other unpaved areas

Measures to Minimize Harm Related to Geology, Soils, Seismic, and Topography

- Standard measures will be used, including preparation of detailed geotechnical studies during design build phase. To reduce high potential for seismic slope instability or lateral spreading, additional measures will be incorporated for new structures.

Paleontology

Potential Impacts

- Paleontological resources may be affected by project due to earth-moving activities

Measures to Minimize Harm Related to Paleontology

- If auguring or foundation construction will penetrate 5ft or more into undisturbed sediment, a

Paleontological Monitoring Plan (PMP) will be prepared and adhered to.

Hazardous Waste/Material

Potential Impacts

- Properties used for industrial and automotive uses within the project disturbance limits may routinely store hazardous wastes and materials that will be relocated and/or removed off site prior to acquisition of these properties.
- Potential exists for contact with hazardous materials during construction.
- Site concerns lie approximately 1,000 ft south of the I-605/I-405 connector due to a traffic accident in 1987 that resulted in the spillage of 220 gallons of diesel fuel.
- Site concerns occur on the I-405 northbound shoulder, just south of the I-605 interchange. The site contained two 30-gallon open trash bins and two 5-gallon buckets with lids that appeared to be dumped.
- Approximately 10 cubic yards of unidentified soil was observed on the southeast side of the Newland Street overcrossing.

Measures to Minimize Harm Related to Hazardous Waste/Material

- Standard measures will be used, including sampling for ADL prior to completion of Final Design within unpaved locations adjacent to the existing roadway ROW within the study area if such locations have not been tested, and if signs of potential impacts (e.g., odors, discolored soil, and any hazardous waste) are observed during construction activity, construction shall cease and the California Department of Transportation's Unknown Procedures for Construction shall be followed.
- Prior to construction, if still present, two 30-gallon open trash bins and two 5 gallon buckets that were dumped in the I-405 northbound shoulder just south of the I-605 interchange shall be removed and properly disposed of by the contractor.
- During the construction phase, the upper 2 ft of soil excavated along the I-405 northbound shoulder from the I-605/I-405 connector to approximately 1,000 ft south of the I-605/I-405 connector shall be set aside and tested for TPH (gasoline and diesel) by the contractor before being disposed of or reused at the site.

Air Quality

Potential Impacts:

- Temporary impacts to emission levels will occur due to roadway construction.

Measures to Minimize Harm Related to Air Quality

- Standard measures will be used, including those specified in the Caltrans Standard Specifications Section 14, compliance with all applicable laws and regulations related to air quality, fugitive dust emissions control, construction site soil binder on unpaved roads, proper construction equipment emission requirements, construction site dust control, storage and location of construction material discharge, and covered transported material.
- The construction contractor shall apply water or dust palliative to the site and equipment as frequently as necessary to control fugitive dust emissions. Fugitive emissions generally must

meet a "no visible dust" criterion either at the point of emission or at the ROW line, depending on local regulations.

- When hauling material and operating non-earthmoving equipment, the contractor shall prevent spillage, and limit speeds including those of earth moving equipment.
- The contractor shall minimize use, trips, and unnecessary idling of heavy equipment.
- The contractor shall maintain and tune engines per manufacturer's specifications to perform at United States Environmental Protection Agency (USEPA) certification levels, where applicable.
- The contractor shall minimize unnecessary idling of construction equipment.
- The contractor shall prohibit any tampering with engines and require continuing adherence to manufacturer's recommendations.
- For on-highway vehicles used for this project, contractors are encouraged to meet or exceed the USEPA exhaust emissions standards for model year 2010 and newer heavy-duty on-highway compression-ignition engines (e.g., long-haul trucks, refuse haulers, shuttle buses, etc.).
- For non-road vehicles & equipment used for this project, contractors are encouraged to meet or exceed the USEPA Tier 4 exhaust emissions standards for heavy-duty non-road compression-ignition engines (e.g., construction equipment, non-road trucks, etc.).
- Contractors are encouraged to demonstrate and deploy heavy-duty technologies that exceed the latest USEPA emission performance standards for the equipment categories that are relevant for this project (e.g., plug-in hybrid-electric vehicles-PHEVs, battery-electric vehicles BEVs, fuel cell electric vehicles-FCEVs, etc.).
- Contractors shall prepare an inventory of all equipment prior to construction.
- The construction traffic management plan will be followed to maintain traffic flow in order to reduce emissions.
- Caltrans and OCTA will identify where implementation of mitigation measures is rejected based on economic infeasibility.
- The construction contractor shall route and schedule construction traffic to avoid peak travel times as much as possible to reduce congestion and related air quality impacts caused by idling vehicles along local roads.
- The construction contractor shall install mulch or plant vegetation as soon as practical after grading to reduce windblown particulate in the area.
- Encourage the use of lighting systems that are energy efficient, such as LED technology.
- Encourage the use of lighter-colored pavement where feasible.
- Encourage the use of appropriate recycle construction debris to the maximum extent feasible; all of the AC and PCC pavement and concrete structures removed will be grounded up and reused as base. Steel such as MBGR, reinforcing in structures and sign panels to name a few would be recycled by the contractor for their salvage value. The project will also use a great deal of rubberized AC to meet the State's requirement for tire recycling and;
- Encourage the use of cement blended with the maximum feasible amount of fly ash or other materials that reduce GHG emissions from cement production.

Noise

Potential Impacts

- Potential for long term impacts with noise levels greater than 67 dBA at numerous locations.

- Potential for noise from construction equipment and activities to reach 89 dBA at 50 ft from the noise source.

Measures to Minimize Harm Related to Noise

- The construction contractor shall comply with the Caltrans Standard Specifications Section 14, as it relates to noise and vibration.
- The project shall design and install reasonable and feasible noise barriers as recommended.
- The contractor shall prepare a Noise and Vibration Monitoring and Mitigation Plan.

Biological Environment

Potential Impacts

- Indirect impacts may be caused to natural habitat located near the Biological Study Area (BSA).
- The Developed and Drainage vegetation communities will experience temporary/permanent impacts caused by the proposed alternative.
- The Selected Alternative will result in permanent operational effects associated with placement of roadway fills, structures, and required drainage enhancements/reconstruction. Additionally, no permanent adverse effects on jurisdictional areas are anticipated.
- The Selected Alternative will cause temporary construction-related effects on USACE, RWQCB, and CDFW jurisdictional areas.
- Direct temporary impacts to birds nesting within or adjacent to the BSA may occur if construction, particularly vegetation clearing, occurs during the nesting season. Indirect temporary impacts to nesting birds would include temporary indirect disturbance (e.g., noise, dust, night lighting, and human encroachment) from construction activities. Minimizations measures will be followed to avoid temporary impacts.
- Construction of the project may have the potential to spread invasive species.

Measures to Minimize Harm Related to Biological Environment

- Standard measures will be used including installing high visible barriers around Environmentally Sensitive Areas (ESA) and jurisdictional areas prior to clearing and construction, restricting any native vegetation removal or tree trimming activities to only occur outside the nesting bird season, and conducting preconstruction burrowing owl surveys and potential owl relocation prior to any phase of construction.
- The appropriate responsible resource agency will be consulted to verify delineation results, determine permanent losses and temporary impact areas, and identify compensatory mitigation, as applicable.
- Pre-construction special status plant surveys will be conducted prior to any ground disturbing activities.
- All new highway lighting adjacent to NAVWPNSTA Seal Beach shall not contain features that allow for raptor perches, as feasible.
- All new highway lighting adjacent to NAVWPNSTA Seal Beach shall be directed down towards the highway itself.
- A qualified bat biologist shall conduct a preconstruction bat habitat suitability assessment.
- Weed control will be performed to minimize the importation of nonnative plant material during and after construction.

G. Mitigation Monitoring or Enforcement Program

An Environmental Commitments Record (ECR) has been prepared for the Selected Alternative and is provided in Appendix E in the FEIS. The ECR provides the language of each measure, the party/parties responsible for implementing the measure, and the timing of the implementation of each measure. The ECR provides a process for tracking and documenting the implementation of the project avoidance, minimization, and mitigation measures during the design, construction, and operation of Alternative 3.

OCTA/Caltrans will be responsible for implementing and reporting the status of the measures in the ECR. Monitoring forms will be completed by those party/parties responsible for implementing each measure in the ECR, and verified by the party/parties responsible for monitoring and approval. Completed monitoring forms will be retained by OCTA and will be included with the as-built plans in the State archives. Caltrans will be responsible for construction management and oversight and assuring that the avoidance, minimization, and mitigation measures in the ECR are fully implemented by designated and qualified personnel.

H. Responses to Comments on the Final Environmental Impact Statement

The following letters and emails with comments were received when the FEIS was made available for a 30-day waiting period (April 3, 2015 through May 4, 2015) from the following agencies and parties: United States Environmental Protection Agency, California Department of Fish and Wildlife, City of Costa Mesa, City of Seal Beach, City of Long Beach, and the general public. The total number of comments received was 106 (Public 101; Federal 1; State 1; Local 3). New substantive comments are addressed for NEPA; it is not necessary to address previous comments which have already been adequately responded to in the Final Environmental Document. Letters received with new substantive NEPA-related environmental comments have been summarized and responses are provided below:

Federal Agencies

United States Environmental Protection Agency, Region 9: USEPA acknowledged that Caltrans has responded to its concerns outlined in its comments on the DEIS. USEPA also commends Caltrans for pursuing Alternative 3 as the Preferred Alternative and expresses that its tolled Express Lane facility would promote carpooling and transit patronage and will reduce emissions. However, USEPA raises concern about the nature of the PM2.5 and PM10 conditions in the project area and recommends including the control measures for Fugitive Dust Source, Mobile and Stationary Source, and Administration for these pollutants. USEPA also recommends Caltrans to include in the ROD commitments to implement design or other measures to reduce GHG emissions adapting to climate change impacts.

Response: Caltrans has included additional measures as recommended by USEPA to avoid, minimize, and mitigate impacts for Air Quality and Climate Change (see Section F: Summary of Adverse Impacts and Measures to Minimize Harm). The implementation of air quality measures in itself would be helpful in further reducing CO_2. Caltrans has also modified the Environmental Commitment Record by adding these measures.

State Agencies

California Department of Fish and Wildlife: The comment notes that, as required under Resource Agreement # 43A0284 TO 005 A01, the Department notifies that it will not be providing comments on the Final Environmental Impact Report (FEIR) for the San Diego Freeway (I-405) Improvement project.

Response: No response is necessary to this comment.

Local Agencies

City of Costa Mesa: The City of Costa Mesa provided comments on the Final EIR/EIS questioning the adequacy of responses to their previous comments on the Draft EIR/EIS. The City expressed concerns that not all of the submitted material/comments were addressed.

Response: The material/comments were from various residents that predated the circulation of the Draft EIR/EIS, therefore comments were not specific to the draft document itself. However, in general, the comments were addressed in the Final EIR/EIS Common Responses along with other responses in Appendix R-1 and R-2.

The City also expresses concern that the responses to their comments on the Draft EIR/EIS are not sufficiently detailed; in part, this appears to stem from the statements in the responses indicating that future design (e.g., of toll gantries) and future documents (e.g., the TMP) will provide an increased level of detail.

Response: The current design and documents are sufficient to assess potential environmental impacts. Project details will continue to be developed as the project progresses and will be subject to restrictions of the environmental process. The TMP is a measure to minimize traffic impacts that can only be developed during final design.

The City asked that design modifications be incorporated to maximize the distance of the proposed sound wall behind residences on Nevada Avenue from the residences and that landscaping be used to address visual impact of the sound wall on those residences.

Response: Caltrans and OCTA commit to working with the City of Costa Mesa to minimize impacts to the extent practicable through continuous coordination. This minimization measure has been added above to Section F - Summary of Adverse Impacts and Measures to Minimize Harm. The Environmental Commitment Record has also been modified to include this measure.

Finally, the City expresses concern that Caltrans and OCTA have taken actions prejudicial to the equal consideration of all of the alternatives in the Final EIR/EIS.

Response: The Draft, Supplemental, and Final Environmental documents present all alternatives equally; no decision was made to favor one alternative over another. However, the Final EIS identified the Preferred Alternative and this document, the Record of Decision, approves Alternative 3 as the alternative to move forward for design and construction. As indicated in 23 Code of Federal Regulations (CFR) 771.127, administrative actions may be taken by Lead and Responsible Agencies prior to the conclusion of the environmental process.

City of Long Beach: The City of Long Beach provided comments on the Final EIR/EIS and stated a number of flaws in addressing the requirements of CEQA. Among the City's comments are some that could be construed to apply to NEPA as well, particularly the City's comments regarding the adequacy of

the traffic analysis prepared for facilities in the City of Long Beach, lack of consideration of water quality concerns within the City of Long Beach, adequacy of information related to induced growth, enforceability of measures to mitigate impacts in Long Beach, and the adequacy of responses to comments.

In its comments on the Supplemental Draft EIR/EIS the City of Long Beach made a number of comments, which are reiterated in the City's comments on the Final EIR/EIS, about the details of the traffic analysis prepared for the Supplemental Draft EIR/EIS.

Response: These concerns were adequately addressed in responses to the City's comments GL2-1 through GL2-20 starting on Final EIR/EIS page R2-GL-203. No new pavement in the City of Long Beach is proposed as part of the project; consequently, the potential impacts to water quality would be negligible. Caltrans will comply with the latest NPDES Permit (Order No. 2014-0077-DWQ amending Order No. 2012-0011-DWQ) which includes TMDL compliance. Caltrans will adhere to requirements of the Caltrans NPDES permit (Order No. 2014-0077-DWQ) for this project to address the city of Long Beach's concerns regarding water quality impacts.

With respect to potential growth inducing effects of the project, the City of Long Beach comments indicate that increases in freeway capacity and forecast freeway volume are the result of growth induced by the increase in freeway capacity.

Response: Comments regarding induced demand are addressed in the Common Response – Induced Demand on page R1-137 of the Final EIR/EIS. In the second paragraph of the Common Response, Caltrans and OCTA acknowledge that there will be an increase in traffic on the freeway under the build alternatives and list a set of factors contributing to the increase. Additional travel demand from land development growth induced by the build alternatives is not included in that list because, as noted in the first paragraph of the Common Response, "the proposed project would have no substantial potential for stimulating the location, rate, timing, or amount of growth locally or regionally." Land redevelopment and infill development within the corridor, as well as new development outside the corridor, are not expected to change substantially because of the proposed project.

The City indicates that proposed mitigations in the City of Long Beach lack enforceability because the mitigation involves the negotiation of an agreement between the City of Long Beach and OCTA that includes a payment of amounts identified in the Final EIR/EIS. The City asks when the agreements will be negotiated and what would happen in the event that the negotiations on the agreements fail.

Response: Representatives of the City, Caltrans, and OCTA met on April 7, 2015, and it was decided that discussions/coordination would continue. It is anticipated this discussion would conclude prior to the start of project construction with an agreement. Caltrans and OCTA are committed to payment of the fair share identified in the Final EIR/EIS.

The City indicates dissatisfaction with the responses to comments, particularly regarding the methods used to complete the traffic analysis in Long Beach, the locations studied, and the use of a fair share and the calculation of the share.

Response: The responses to comments GL2-5, GL2-6, GL2-7, GL2-13, GL2-14, GL2-18, and GL2-20 adequately address these questions and no additional response is required.

City of Seal Beach: The City of Seal Beach provided comments on the Final EIR/EIS. Some of the comments reiterated or expanded upon comments previously received from the City or others, but some raised new topics and are discussed here. The City states that the Final EIR/EIS fails to acknowledge, analyze, or disclose the potential adverse effects related to the relocation of the Almond Avenue sound wall particularly with respect to 4 topics.

Response: The Final EIR/EIS discusses relocation of the sound wall in the Common Response – Almond Avenue sound wall on pages R1-101 through R1-104 and covers proposed design options to avoid the sound wall as well as noise, air quality, health, and property value effects. The effects of sound wall relocation are not adverse. Nonetheless, Caltrans and OCTA commit to working with the City of Seal Beach to minimize impacts to the extent practicable through continuous coordination. This includes striving to meet minimum City street standards and ensuring that any improvements meet the requirements of the Americans with Disabilities Act and provide safe passage for emergency service vehicles. This minimization measure has been added as an additional measure to Section F - Summary of Adverse Impacts and Measures to Minimize Harm. The Environmental Commitment Record has also been modified to include this measure.

The City of Seal Beach indicates the Final EIR/EIS does not distinguish between avoidance, minimization, and mitigation measures listed in the Environmental Commitment Record and elsewhere in the Final EIR/EIS.

Response: Regardless of the type of measure, each measure represents a commitment and a reduction in the intensity of the effect. The Environmental Commitment Record in the Final EIR/EIS does identify/and differentiate mitigation measures (for CEQA) from minimization measures. Additionally, many avoidance measures do not need to be identified because, having included the avoidance in the project, there is no longer an adverse effect.

The City of Seal Beach objects to the word "should" and the phrase "to the extent feasible" in the text of measures; according to the City's comments, those words imply less than absolute unequivocal commitment to the measure. The City of Seal Beach cites measure VIS-1, which commits to "protect as much existing vegetation … as feasible."

Response: To quantify the extent of the protection of existing vegetation is neither practical nor realistic.

The City cites measure GEO-2, which says that "Selection of earth-retaining system types should be based on consideration of foundation-bearing capacity, anticipated settlement and ability of the system to tolerate settlements, overall slope stability, constructability, and cost."

Response: The word "should" does not imply less than full commitment to consideration of the factors enumerated but allows for consideration of other factors as the engineering experts deem appropriate and relevant to each system based on site-specific conditions and other variables.

The City of Seal Beach states that the proposed project fails to meet its purpose and need because it does not fully cure congestion and because literature cited in the comment suggests that additional lanes will simply congest a short time after opening.

Response: The Final EIR/EIS is very clear, and the City acknowledges that the purpose of the project is to reduce, not eliminate, congestion. One characteristic of the Preferred Alternative is the Express Lanes, which will be managed to avoid congestion. The proposed project meets its purpose of reducing

congestion for which there is adequate evidence in the Final EIR/EIS including the information presented in Tables 3.1.6-6, 3.1.6-7, 3.1.6-8.

The City of Seal Beach suggests that responses to comments submitted by the City of Seal Beach on the Draft EIR/EIS and Supplemental Draft EIR/EIS were not made in good faith and issues raised in those comments have been ignored or remain unaddressed.

Response: Every comment made by the City of Seal Beach and others was addressed adequately and presented in the Final EIR/EIS. Many of the comments asked for additional evaluation that was deemed either not necessary or inappropriate.

The City of Seal Beach states that "representatives of the City have been informed that it is the Lead Agency's intent not to respond to any supplemental comments" and that the Lead Agency will not be "addressing community concerns through open dialogue and full disclosure...."

Response: Caltrans and OCTA continue to meet with and dialogue with the City of Seal Beach on a number of topics. It is not necessary to address comments that were already adequately responded to in the Final EIR/EIS.

The City of Seal Beach suggests in its comments on the Final EIR/EIS that the potential use of the design-build procurement method for the project postpones identification of project details that result in failure to identify and mitigate project impacts.

Response: The level of detail to which the design and environmental evaluation have been developed is sufficient to satisfy the requirements of the environmental process and to appropriately analyze project effects and identify appropriate measures to address adverse effects.

The City of Seal Beach claims that action taken by the OCTA Board of Directors on April 27, 2015 to assume the lead role in the implementation of the project has implications for the environmental, procedural, and operational aspects for the lead agency in the environmental process.

Response: The action taken by the OCTA Board is only related to design and construction of the project and does not change Caltrans lead agency status in the environmental process, including the development of the environmental commitment record. As indicated in 23 CFR 771.127, administrative actions may be taken by Lead and Responsible Agencies prior to conclusion of the environmental process.

The City of Seal Beach notes some apparent contradictions or confusing language in the Final EIR/EIS and the responses to comments on the Draft EIR/EIS with respect to the operating policies of Express Lanes and whether HOVs with 2 occupants will be required to pay a toll.

Response: Section C above clearly states the objectives for opening the Express Lanes; it also indicates that operational adjustments may be needed in response to future conditions.

The City of Seal Beach suggests that, because public-private-partnership legislation is cited as the authorizing legislation for operation of a toll facility on I-405, the entity hired to manage and operate the Express Lanes will keep any excess revenues.

Response: OCTA and Caltrans intend to procure a Toll Operations Manager to manage the Express Lanes under contract for a fee and to use excess revenue to provide transportation facility improvements in the corridor. Nonetheless, the question relates to economic, not environmental questions.

Public Comments

Caltrans also received emails and verbal comments from members of the general public. Most of the public concerns are repetitive and similar in nature to those received during the circulation of the Draft EIR/EIS. The comments raised include the following topics: Opposition to tolling, opposition to relocation of the Almond Avenue soundwall, bottleneck at the Orange/Los Angeles county line, noise impacts, air quality, long-term construction impacts, and health impacts.

Response: Caltrans has adequately responded to all these concerns under Common Responses in Appendix R-1 and R-2, and Volume 1 of the Final EIR/EIS. Received public comments have been categorized as below:

Opposition to Tolling: Several comments were received indicating opposition to tolling. The reasons provided included:

- Measure M does not support toll lanes as they are a misuse of taxpayer's money.
- Toll lanes penalize average commuters by imposing a toll on the existing free HOV lanes (double taxation).
- Toll lanes will discourage carpooling and will further congest existing GP lanes.
- The alternatives adding one or two GP lanes are preferable.
- Toll Lanes will cater only to more affluent people.
- HOV/Toll Lanes will affect one's commute and/or be a financial burden.
- Ingress/egress points to Toll Lanes are few and would restrict access to businesses along the project corridor.
- FasTrak system is not a user friendly and unmanned toll gantries are a problem for occasional travelers.

Bottleneck at the Orange/Los Angeles County Line: Comments include the claim that there is no HOV access at the southbound I-605 and I-405 and that the project would disrupt the traffic flow at the Orange and Los Angeles county line, create a bottleneck, and increase noise, air pollution, and associated health risks.

Long-term Construction impacts: Comments were received indicating the project will have unbearable long-term construction impacts. They pose questions like why the Selected Alternative was not constructed with WCC project and why there are constant reconstructions.

Noise Impacts: Comments say that there are not enough soundwalls.

Air Quality: Comments were received that there will be temporary air quality degradation due to the project construction. It was also asked why more recent data was not used for air quality analysis.

Health Impact: Comments were received regarding health risks.

I. Record of Decision Approval

Alternative 3 for the I-405 Improvement Project would best meet the project purpose and need. The identification of Alternative 3 as the Selected Alternative was based on evaluation of the substantive comments received from agencies and the public on the DEIS, Supplemental DEIS, and FEIS, and the supporting technical studies prepared for the project. All practical measures to avoid, minimize, and mitigate environmental harm have been adopted and will be incorporated into this decision. It is the decision of Caltrans to approve Alternative 3 as the Selected Alternative for the I-405 Improvement Project.

The Record of Decision for the I-405 Improvement Project is hereby approved.

Ryan Chamberlain, District Director
California Department of Transportation

5/15/15
Date